

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016672**Date Inspected:** 31-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhao Chen Sun**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

TOWER JETTY

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 00469

Bolting Tension Verification:

This QA Inspector witnessed final Bolt tension verification approximately 10% for south tower lift-2 tower bracing and grating supports. Final tension verification found to be in general compliance.

Details of bolt size and final torque value are as follows:

Bolt sizes used were M22*55/M22*110 and final torque value was 437 N-m.

Manual Torque wrench used with serial number noted as XO2-778.

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 00470

Bolting Tension Verification:

This QA Inspector witnessed final Bolt tension verification approximately 10% for east and north (80.75 diaphragm only) tower lift-2 tower bracing and grating supports. Final tension verification found to be in general compliance.

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Details of bolt size and final torque value are as follows:

Bolt sizes used were M22*55/M22*110 and final torque value was 437 N-m.

Manual Torque wrench used with serial number noted as XO2-778.

This QA Inspector observed the following work not in compliance:

Description of Incident:

During Bolting Tension Verification in South and North Tower of Lift 2, this Caltrans Quality Assurance (QA) Inspector discovered the following issues:

- Four (4) additional bolt holes at 80.75 M single diaphragm in South Tower Lift-2.
- Four (4) additional bolt holes at 80.75 M single diaphragm in North Tower Lift-2.
- These Tower shafts are located at Heavy Dock.

Applicable reference:

Approved Drawing Sheet #SSD1-SA362 (typical)

This QA notified ZPMC QC identified as Mr. Li Hai Rong and ABF inspector identified as Mr. David Wu of the above issue and that an incident report will be generated.

For further information see below pictures:-

MEASUREMENTS ON LIFT-2 TOWER STRUTS

This QA Inspector carried out the measurements on Tower Struts to check the length, flange to flange distance, stiffener to stiffener distance, bolt hole to edge of the strut distance and 1:1 fillet weld termination & 10mm minimum clearance from fillet to CJP at stiffeners. Measurements were recorded on the data sheet and submitted to the assigned task leader. The identified component designations reviewed are as follows

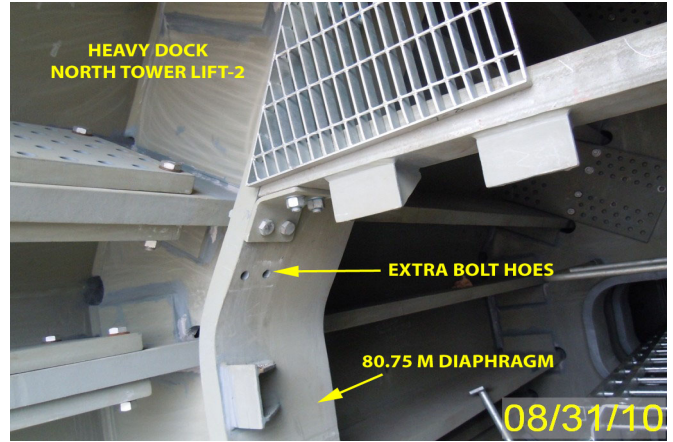
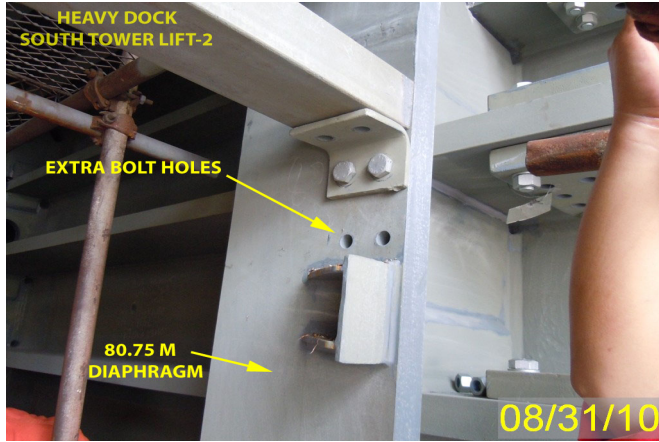
TOWER STRUTS

1. ND1 – A476 – 53M – 1
2. ND1 – A476 – 65M – 1
3. ND1 – A476 – 65M – 2
4. ND1 – A476 – 77M – 1
5. ND1 – A476 – 77M – 2

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng - 15921845703, who represents the Office of Structural Materials for your project.

Inspected By: Kumar,Sandeep

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer